in the middle. Pro- and mesothorax strongly rugosely punctured, covered thickly with white hair; the pronotum is transverse at the base, its sides triangularly projecting; on the posterior half of the mesonotum are two shallow furrows. Apex of postscutellum rounded. The apex of the median segment has an oblique slope and is transversely aciculated; it is bounded above and at the sides with a stout keel, which is bent down towards the centre above; from this a narrow keel runs down the middle. Pro- and mesopleuræ strongly punctured; the punctures large and distinct; there is a somewhat triangular red mark at the tubercles. Metapleuræ finely and closely longitudinally aciculate; the upper half irregularly longitudinally striated. Legs black; the anterior tibiæ entirely in front and the middle pair at the base testaceous. Wings fuscous-violaceous, the posterior pair paler; the second cubital cellule above not quite one half the length of the third. Abdomen black; the first and second segments lined with black on the apex; the petiole has an oblique slope on the base and is sharply keeled above; it is somewhat strongly but not closely punctured; the other segments are obsoletely punctured; the base of the second is crenulated.

Allied to *O. sikhimensis*.

Note.—At p. 415 *anteà*, for *Polistes khasianus* read *P. lepcha*.

[To be continued.]

BIBLIOGRAPHICAL NOTICES.

Catalogue of Eastern and Australian Lepidoptera Heterocera in the Collection of the Oxford University Museum.—Part II. *Noctuina*, *Geometrina*, and *Pyralidina*. By Colonel C. Swinhoe, M.A., F.L.S., F.Z.S., F.E.S. *Pterophoridæ* and *Tineina* by the Right Hon. Lord Walsingham, M.A., LL.D., F.R.S., &c., High Steward of the University of Cambridge, and John Hartley Durrant, F.E.S., Memb. Soc. Ent. France. With eight Plates. (Oxford, Clarendon Press, 1900.) Pp. vii, 630.

The importance of public collections of insects depends partly on the number of species accurately named, and partly on the possession of types, by which the descriptions of the original describers of a species can be checked or verified. The original specimens on which species are founded should always find their way eventually into public collections; for private collections are not always easy of access, and their contents are almost sure, sooner or later, to be lost or dispersed. Great Britain is peculiarly rich in public collections, and may boast of a considerable number of the types of Linné, preserved by the Linnean Society; though Queen Ulrica's collection, from which Linné likewise described many species,

remains at Stockholm. Fabricius, the pupil of Linné, and his worthy successor in entomology, was much in England, and described the insects in the collections of Sir Joseph Banks, Dr. Hunter, and others; and though some of these types are missing, a large proportion are still preserved in the British Museum (Natural History) and also in Glasgow.

Oxford University Museum contains no types of the last century; but the nucleus of its entomological collection consists of the united collections of Hope and Westwood, to which large additions have been made from other sources, especially from the collection of Wilson Saunders, which was specially rich in the types of moths described by Francis Walker from the collections formed by Dr. A. R. Wallace in the Malay Archipelago. As Walker's descriptions are frequently short and unsatisfactory, it was a matter of considerable scientific importance to verify them as far as possible from the original types; and hence the present work was undertaken by Col. Swinhoe, and the first volume, containing Sphinges and Bombyces, and illustrated by eight plates, was published in 1892. The second volume, just issued, and twice the thickness of the first, completes the subject. It is a full synonymic catalogue of the Eastern and Australian moths in the Oxford Museum, and special attention has been paid to the elucidation of Walker's types, a considerable number of which are figured, as well as many new species which are now described and figured by Col. Swinhoe and his coadjutors for the first time.

Books like the present are of great use to all entomologists who are working at exotic moths, and we cordially recommend Col. Swinhoe's work to their special attention.

Sexual Dimorphism in the Animal Kingdom. By J. T. Cunningham, M.A. London: Adam and Charles Black, 1900.

Colour in Nature. By Marion I. Newbigin. London: John Murray, 1898.

In the production of the first-mentioned book, the nucleus of which appeared in the pages of the now unhappily extinct 'Natural Science,' Mr. Cunningham has, without doubt, spared neither time nor pains. As a result, he has brought together a considerable number of facts of real and lasting value. Whether, however, his interpretation of these facts will find favour with students of this subject is another matter: we shall be surprised if he succeeds in making a single convert.

Mr. Cunningham is Lamarckian in principles. His object has been, he tells us, not to "attempt to prove that acquired characters are inherited," but "merely to point out how remarkably the multitudinous facts all agree with the hypothesis that secondary sexual characters are due to the inheritance of acquired characters." This very cautious statement of his case looks somewhat as though Mr. Cunningham were a little afraid of the ghost which he has conjured up.

The beard of man, and especially of the Caucasian races, it is suggested, owes its conspicuous development to the stimulation of